1
MJ
1.0
1.1
1.25
1.4
1.6
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.8
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

DOCUMENT RESUME

ED 215 478 EC 142 137

AUTHOR Lieman, Meyer, Ed.
TITLE High School Programs for Students with Special Needs.
INSTITUTION Council for Exceptional Children, Buffalo. New York State Federation of Chapters.
PUB DATE 80
NOTE 29p.
AVAILABLE FROM The Forum, 582 Baldy Hall, SUNY/Buffalo, Amherst, NY 14260 (no price quoted).
JOURNAL CIT Forum; v6 n4 Win 1980

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS After School Programs; Articulation (Education); Clerical Occupations; Curriculum; *Disabilities; High Schools; Inservice Teacher Education; Microcomputers; *Program Descriptions; Regional Programs; Vocational Education; Work Study Programs
IDENTIFIERS *New York

ABSTRACT

Thirteen brief articles look at high school programs for students with special needs with emphasis on programs offered in New York State. Articles have the following titles and authors: "Vocational Education for Handicapped Students in New York City High Schools" (F. Yauch); "Development of a Comprehensive Program for High School Special Education Students" (M. Lieman); "Characteristics of Bronx Special Education Students Entering High School Programs in September, 1980--The Articulation Processes" (J. Salvati); "Implementing a Special Education Program in the Comprehensive High School" (R. Mastruzzi); "The Occupational Training Center Program" (S. McSweeney); "The Vocational High School Experience" (D. Miller); "The Work-Shop Program Bridging the Gap between Employability and Employment" (C. Cumberbatch); "After-School Vocational Skills Program for Handicapped Students" (L. Chernow); "A Structured Curriculum Approach to Teaching Life Skills" (J. Hickey); "Clerical Skills Training for the Handicapped--A Regional Approach" (P. Blake-Ward); "The Role of the Job Developer" (R. Coar); "Microcomputer Applications to Special Education Administration" (E. Martin); and "Expanding Career Opportunities for High School Special Education Students--An Inservice Education Project" (B. Flugman, et al.). (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Herbert Foster
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

VOLUME 6, NO. 4

the FORUM

...n of The New York State Federation of Chapt... ...ildren

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

WINTER 1980

ISSUE TOPIC: High School Programs For Students With Special Needs

CONTENTS

Page

Contributors
MEYER LIEMAN/Viewpoint-Guest Editor 3

FRANCES YAUCH/Vocational Education for Handicapped Students in New York City High Schools 4

MEYER/LIEMAN/Development of a Comprehensive Program for High School Special Education Students 6

JOSEPH R. SALVATI/Characteristics of Bronx Special Education Students Entering High School Programs in September, 1980: THE ARTICULATION PROCESSES 7

ROBERT R. MASTRUZZI/Implementing a Special Education Program in the Comprehensive High School 8

STEPHEN D. McSWEENEY/The Occupational Training Center Program 10

DAVID ALLEN MILLER/The Vocational High School Experience 11

CARLEEN D. CUMBERBATCH/The Work-Shop Program Bridging the Gap Between Employability and Employment 12

LARRY CHERNOW/After-School Vocational Skills Program for Handicapped Students 14

JOSEPH G. HICKEY/A Structured Curriculum Approach to Teaching Life Skills 15

PETER BLAKE-WARD/Clerical Skills Training for the Handicapped—A Regional Approach 16

RICHARD COAR/The Role of the Job Developer 17

EDWARD G. MARTIN/Microcomputer Applications to Special Education Administration 18

BERT FLUGMAN, LEO GOLDMAN, & DAVID KATZ/Expanding Career Opportunities for High School Special Education Students: An Inservice Education Project 19

PROFESSIONAL NEWS/John Thompson 27

Record Review/HARRIET RADWELL & ELEANOR NOVINS/*Songs in Motion* by Henry V. Colelle & Mario Truglio 26

Calendar reminder/November 13-15, 1981/Buffalo Hilton Hotel/State Convention

the FORUM

EDITOR
Dr. Herbert L. Foster (402)
Professor, Dept. of Instruction
582 Baldy Hall
State Univ. of N.Y. at Buffalo
Amherst, New York 14260
(716) 636-2451
100 Sedgemoor Court
Williamsville, New York 14221
(716) 634-4156

ASSISTANT EDITOR
Ms. Patricia Skok (402)
Resource Room Teacher
BOCES Erie 1
Lancaster, N.Y. 14086
(716) 689-7057

ASSISTANT EDITOR—LITERATURE REVIEW
George Singfield (71)
Director
Special Services Program
Samuel Field YM YWHA
58-20 Little Neck Blvd.
Little Neck, N.Y. 11362
(212) 225-6750

ASSISTANT EDITOR—INTERN
David B. Lazerson
140 Heath Street
Buffalo, N.Y. 14214
(716) 237-5506

MANAGING EDITORS
Tony & Randi Daddiego
43-36 Robinson Street
Apt. 4 G
Flushing, N.Y. 11355
(212) 886-3355

ASSISTANT EDITOR—PROFESSIONAL NEWS
John Thompson
Coordinator of Special Education
Barker Central Schools
Quacker Road
Barker, N.Y. 14012
(716) 795-3201

Expanding Career

(Continued from Page 19)

Exemplary vocational education programs and practices for special education students in the regular high schoool.

A dialogue with upper echelon regular education administration (19 principals from the Bronx) regarding implementing or enhancing school based vocational/career programs for special education students.

Exemplary vocational education programs and practices for special education students—the BOCES model.

Industry and its involvement in training and hiring special education students.

Agency resources and their vocational services for special education students.

The biweekly sessions were designed to be informative and stimulating. Each meeting included some formal presentation and some small group activities to discuss implications and to plan for the future. At each session, some written materials were distributed to the participants—article reprints, description of resources, etc. At most sessions, teams met together for a brief period to discuss the implications of that day's subject matter for their school.

Each team member selects 10 colleagues—the multiplyees as they are called—who are a kind of network for dissemination. The project staff provides team members with brief reprints and other materials for dissemination to their multiplication network. The multiplier process was a most difficult one to implement because of the busy schedules of those involved. Therefore, the multiplication effect of seminar activities during the first year was limited mainly to distribution of those materials by team members to their multiplyee colleagues and occasional conversations.

In the week between workshop meetings, senior project staff visited the participating schools and met informally with team members to help them plan the projects they were developing for their schools.

During the course of the year, team members were asked to inventory their school's vocational and career programs—both those conducted entirely for special education students and those regular education programs in which special education students were mainstreamed. By comparing notes, the teams received valuable ideas from each other and were stimulated to recommend additional programs in their schools.

Rather extensive evaluation was done during the course of the first year. Specially constructed questionnaires were developed to tap attitudes and information regarding handicapped people, and the respondent's professional activities involving handicapped students. These questionnaires were administered to team members and multiplyees on a pre and post basis; comparison of pre and post data suggested positive changes during the course of the year.

Another form of evaluation consisted of a five-minute brainstorming kind of feedback at the end of each workshop—"how did things go today?" These were used in a formative manner to modify later workshops.

Finally, a team of outside consultants was engaged. They visited one workshop and several school sites and interviewed most of the participants. They prepared an extensive report which is being put to use in the second year of the project. One major conclusion, confirming the project staff's own conclusion, was that the special education coordinator for the school is perhaps the single most critical force on that school's team. That person's commitment to the project's aims seems to be an extremely important influence on the involvement of other team members and on the impact of the project on the school.

One of the most important outcomes of this project is its demonstration of the great value of an interdisciplinary team functioning as a special education committee for the school. With vocation/career know-how on the team, there is opportunity for continuous study, communication, and recommendation regarding the needs of the special education program in relation to the resources of the school and community.

As this is written, we are beginning the second year of the project. The positive response of school staff, both in the Bronx and Queens, is gratifying, and it appears that the project has had an impact on participating schools. During this second year, we will maintain contact with the Bronx schools as consultants to help them implement the projects they defined as their goals for this year.

EXECUTIVE COMMITTEE

Dr. Janet L. Jacobs (248)
President
65 Covington Drive
Buffalo, New York 14220
(716) 825-0669
Dr. Gary O. Carman (615)
President-Elect
1156 North Broadway
Yonkers, New York 10701
(914) 965-3700
Alexander P. Tureaud
Vice-President
Cross Pond Road
South Salem, New York 10590
(914) 763-5780
Dr. Judith A. Bondurant (402)
Treasurer
285D-2 Scamridge Ct.
Williamsville, New York 14221
(716) 878-5317
Dr. Stanley A. Winters (805)
Secretary
56 Webster Avenue
Manhasset, New York 11030
(516) 365-9241

Dr. Richard J. Lee (402)
Past-President
127 Winston Road
Buffalo, New York 14216
(716) 837-5351
Dr. Eileen Corcoran (37)
Governing Board Representative
64 Centennial Avenue
Brockport, New York 14420
(716) 637-6417

ADVISORY BOARD

(Regional Representatives)
Ms. Sarajane McNess *(Buffalo)*
4793 Bailey Ave. (402)
Buffalo, New York 14226
(716) 834-6389)
Ms. Diana Jensen *(Rochester)*
724 Edgemere Drive (37)
Rochester, New York 14612
(716) 352-2440
Mrs. Helena Ozer *(Syracuse)* (1029)
7816 Ravenswood Lane
Manlius, New York 13104
(315) 682-6062
Dr. John R. Moyer *(Albany)*
787 Central Parkway (798)
Schenectady, New York 12309
(716) 374-5644
Mrs. Mary Bader *(New York Region I)*
124 Summit Avenue
Tappan, New York 10983
(914) 359-2329
Elizabeth Teahan *(New York Region II)* (742)
3534 Tryon Ave.
Bronx, New York 10467
(212) 654-9311
Mrs. Bertha Perez *(New York Region III)*
59-35 160 Street (805)
Flushing, New York 11365
(212) 762-0579
George Singfield *(Long Island)*
124 Smith St. (71)
Freeport, New York 11520
(516) 868-3013

VIEWPOINT

Meyer Liehman, Ph.D.
Assistant Director
Program Development Unit
Division of Special Education
110 Livingston Street
New York City Board of Education
Brooklyn, N.Y. 11201

The increasing attention being given to high school programs for students with special needs is warranted. What is taking place is a currently subtle, growing and—ultimately—significant and dramatic realignment of the high school population affecting each high school and every program and service provided to high school age students. Factors contributing to this change include: 1) the law; 2) the general direction toward equality of opportunity and to the elimination of discrimination on the basis of race, color, sex, or handicap; 3) the 'growing up' of children who had previously been identified and placed in special education programs at lower grade levels and who are now of high school age; 4) continuing referrals and required timely, appropriate placement of students at the high school level, through age 21. These factors, and others, have taken place during a period of general high school population decline, significantly increasing the proportion of special education students in the total high school population.

High School students with special needs, a sizable percentage of whom would previously have dropped out of school—or, if in school, would not have been able to earn a diploma—when out of school are a significant part of the adolescent unemployed. . .and, we are discovering. . .are too often unemployable. These characteristics are also exhibited by many non-special education students, for whom the high school experience has resulted in dropout. . .non-diploma. . .unemployment. . .underemployment. The programs described in this issue of *The FORUM*, and other programs for students with special needs, may also be defining a direction for those on the continuum of non-special education students, many of whom manifest characteristics and reflect needs that, to a lesser degree, are parallel with those students identified as requiring special education.

The issue of *The FORUM* provides an opportunity to share experiences through the reality of those closely involved with some of the developing programs in New York City, especially for the pilot program that was established for the Bronx during the period October, 1977, through June 1980.

The articles are organized in a way that should give an increasingly detailed picture (and feeling) of how high school programs for students with special needs are visualized, developed, and implemented. You will experience the needs. . .the commitment. . .the vitality. . .and the actuality of programs as written by the DOers. These are the professionals who are translating into day-to-day reality (complex, changing, sometimes contradictory. . . law, philosophy, court orders) the bottom line of flexibly providing the most appropriate high school setting, program and placement for each student with special needs.

Vocational Education For Handicapped Students In New York City High Schools

Frances Yauch
Coordinator of Career Education
for Handicapped Students
Division of Special Education
110 Livingston Street
Brooklyn, New York 11201

As the 1980-81 school year begins, more than 11,000 special education students attend the City's hundred high schools. The number has increased dramatically in the last year, from 8,000 and is growing rapidly. As large numbers of younger special education students move up the educational ladder, new high school classes are being formed to serve them.

How can we meet the challenge of providing more services to handicapped students with fewer dollars? We have to begin to create new ways of serving children with existing resources; let us look at vocational training for New York City's handicapped high school students in this time of fiscal austerity, and at the permutations and combinations of existing resources we are developing to serve them.

Everywhere, traditional vocational education is expensive. Shop equipment and supplies, and shop classes with their lower teacher-pupil ratios, all cost more than academic education. Because no additional resources are available to us to provide vocational programming, we are developing programs by utilizing existing resources and combining those resources in new ways. Our children are entering a high school system which is already on short rations in the area of vocational training, yet their need is acute. Because so many special education students will not go on to college, preparation for entry into the world of work after high school becomes the focus of their education, the center of their own and their parents' hopes, dreams and aspirations.

Special education students are not alone in their eagerness for vocational education. Each year more than 10,000 students are turned away from the City's 22 vocational high schools because of inadequate space, and enter their neighborhood academic/comprehensive high school instead. Increasingly, these schools are offering vocational programming to meet student demands for a strong vocationally oriented secondary program.

This increasing focus on vocational education is relatively new. Ten years ago the City's vocational high schools were being phased out. The Board of Education looked to large academic/comprehensive high schools to provide the occupational education of the future. These schools offered more limited job preparation, combined with academic skills. The demand for intensive trade training did not dwindle, as expected. Instead, it increased dramatically. Today, Vocational Education Act funding is being used to modernize and upgrade those same vocational schools, but there are still not nearly enough places to serve the students who want to attend. The competition for space in the vocational high schools has slowed the integration of special education into those schools. Space to provide resource rooms is scarce; shop time and shop teacher time is often sharply limited. In some vocational schools the solution to integration of special education into the school has been to admit only those special education students who can function almost entirely in the mainstream. While this has helped us to begin programs on a small scale, in the long run, such a solution is sharply limiting. A viable special education program in a vocational high school needs to have two tracks, a mainstream and a special education track, in both academic and vocational skills areas, with the possibility of movement in either direction to accommodate to changes in student needs, and while providing for a range of programming from full mainstreaming to special class placement. We have been able to provide this kind of programming in a number of vocational high schools. Each program has been uniquely designed to accommodate to the resources available within the school.

At George Westinghouse Vocational and Technical High School, the ninth year class has a rotating exploratory shop experience entirely in special education shop classes; in the tenth year students are placed in mainstream shops with the few students who cannot be mainstreamed retained in the special shops.

At the New York School of Printing, a special offset printing shop, provided by VEA funds, serves the school's deaf and brain-injured students. The shop functions eight periods a day, serving three classes of special education students. Students who need less attention are mainstreamed in the school's printing shops.

At Thomas Edison Vocational High School, a special building maintenance curriculum was developed, utilizing six building trades shops, offering students one term in each area. Although the program was designed for special education students who could not handle a full trade training course, some reverse mainstreaming has taken place and

some "mainstream" students are in the program. Special education students are mainstreamed when they show the capability of handling the full trade training program.

In each of the schools mentioned, in fact, in each of the 15 vocational high schools in which there are special education students, a unique program has been developed, to accommodate to the needs of students, within the resources of the school.

In the academic/comprehensive high schools, as well, a unique program has evolved in each school. Most schools have some vocational training options, and the special education staff mainstreams students in these classes whenever they can. Offerings differ widely but most of the schools have a business/typing program, an industrial arts exploratory program, and a cooperative education program. Twenty-nine high schools have an occupationally-oriented home economics course. In addition, many of these high schools have developed one or more strong occupational options in the mainstream. John Bowne High School has a well-known horticulture program. August Martin and Wingate High School have aviation programs; Edward R. Murrow, a television program; Adlai Stevenson High School, a child-care program, to mention a few. These occupational training programs, while using less of the student's school day than the intensive vocational high school trade and technical training programs, are nevertheless strong, focused job-training courses.

If we could place all or most of our job-interested students in either a vocational high school shop program or an academic/comprehensive school occupational training course, we would be well on the road to resolving job preparation for our students. The reality is different. Relatively few of our students in the academic/comprehensive high schools are mainstreamed for vocational training. In some high schools we have developed our own special education vocational shop programs with small amounts of VEA funding to modernize existing shop spaces. Those programs include General Industries Laboratories Shops, offering a range of industrial arts activities, emphasizing vocational attitudes and behaviors. Other programs are in a number of occupational areas; health careers, preparing students for hospital and laboratory assisting; clerical skills; horticulture; food trades, each program building on an existing mainstream course within the school, offering the potential to mainstreaming promising students. The special education shops offer opportunities to students who could not otherwise participate in occupational education, but the range and depth of their offerings is limited. The special education shop does the important job of developing the student's attitudes toward work, and his work behaviors. It cannot teach all trades to all students. It does not provide for those students who are interested in another occupational area, or who need broader opportunities to explore other alternatives.

Special education students are not alone in their need for broader occupational programming. To meet this need, the Board of Education has developed alternate occupational education programs including the Shared Instruction Program, which offers students a variety of occupational skills classes, for credit, in many high schools throughout the City. Students attend their home school for a half day for academics, and travel to the shared instruction school for shop. This program offers a wide range of options, and some special education students, especially among the emotionally handicapped, have taken advantage of it.

Another flexible shop program is the "After-School Occupational Skills Program". It offers classes two afternoons a week (or Saturday mornings) for experience but, in most instances, not for credit. Many vocational options are available at 29 high schools throughout the City; a number of special education high school students attend this program.

The Division of Special Education has its own after-school program, "Citywide Integration of the Handicapped in Vocational Training" which offers shop classes to students who need a small class setting and more support. There are classes in 23 high schools, serving 650 students. This year, at five sites of the After-School Occupational Skills Program, a special education component will provide support for students in those mainstream classes, increasing the numbers of students who can be served, for a small number of additional VEA dollars. Many experimental programs have evolved through this umbrella, including the Bronx After-School Vocational Skills Program for Handicapped Students, discussed elsewhere in this issue. Another, evolving program, is "Typing for the Handicapped", developed by Jack Heller, a nationally-known consultant in teaching typing skills to the handicapped. The course offers typing programs, designed for each student, with course materials geared at the student's reading level. The typing classes are currently providing an exciting language skills development program for deaf students as well.

Some of our long-standing high school programs (originally developed for retarded adolescents but now cross-categorical) have utilized job-training approaches without focusing on scarce shop space. The High School Work/Study Program and the Retrieval and Redirection Program have used volunteer work experiences, paid and stipended part-time jobs, and vocational rehabilitation agency experiences as vehicles to build skills, using the classroom curriculum to support the development of student work behaviors and attitudes, as well as academic skills.

Job experience, particularly paid job experience, is deeply valued by students, parents, and teachers alike.

The Placement and Referral Center for the Handicapped, a Board of Education center providing job placement for handicapped students, maintains a close working relationship with the high schools, providing summer and school year jobs, both in the private sector, and through stipends. Scarce stipended jobs are built into programs as the culmination of

(Continued on Page 20)

Development Of A Comprehensive Program For High School Special Education Students

Meyer Lieman, Ph.D.
Assistant Director
Program Development Unit
Division of Special Education
110 Livingston Street
Brooklyn, New York 11201

Background

Once in a great while, an opportunity presents itself that transcends usual day-to-day events. One that, if the moment is sensibly seized, provides the possibility to effect a significant, positive impact upon the needs of students and to establish meaningful first steps in a fertile direction. . .on a fairly large scale.

Such was the case for high school programs, when the Division of Special Education in New York City, in looking to move the thinking, administration and supervision of special education programs closer to students, classes and schools—established (1977) a borough-wide pilot project to decentralize (Regionalize) special education programs. The Bronx was selected as the pilot borough. In broad terms: whereas previously central, city-wide Bureaus had been established (appropriate for their day) for identifying and providing service for needs according to handicap (neurologically impaired, emotionally handicapped, mentally retarded, physically handicapped, etc.)—this approach would pilot the *borough* administration and supervision of all special education programs housed in the Bronx.

There was a number of specific areas of change, including: cross categorical supervision; special education classes and related services in each school were considered part of a Special Education 'Learning Center' to minimize the labeling of children and to maximize use of available resources; personnel, budget, and busing components were housed in the Bronx Special Education Regional Office; at the high school level, the opportunity to develop a fresh, coherent approach, coordinating available tax-levy resources with funded programs for a more effective, comprehensive program for students.

As of September 1979, as part of SPECIAL EDUCATION IN TRANSITION, introduced by Dr. Jerry Gross, Executive Director, Division of Special Education—and approved in the Jose P. court order—all of New York City Special Education is being Regionalized, (except for low incidence programs), generally according to borough. . .with many goals not unlike those of the original pilot project in the Bronx. Taking the process some steps further, additional responsibilities and functions are being transferred to the district level (COH, Supervisors) and school level (School Based Support Teams).

Needs Of Special Education Students In High School

The opportunity to look at students and programs and schools openly. . .with flexibility to evaluate existing programs. . .to initiate new programs, as needed. . .to set priorities based on the needs of students—*and to be able to act on them.* . .provided a rush of professional interest and energy that reinforced this 'now' direction, and increased the likelihood of positive, productive results.

The needs of the students became very clear as we looked at them realistically and discussed them candidly:

1. The large majority of Special Education students in Bronx high schools at this time could not possibly be (or be made) eligible for diploma, under current New York State requirements.
2. The large majority of Special Education students who had left school (due to graduation, certification, or drop-out) were neither in a continuing post-high school setting, nor receiving rehabilitation services of any kind, nor were they employed.
3. The majority of Special Education students who had left school were not employable, even for entry level jobs.
4. The counter-point to the above was that much of the existing resources and thinking was being directed toward the diploma. We determined that fewer than 10% of Special Education students in the Bronx could possibly receive a diploma. (NOTE: The program must, and does, reflect that every student who could possibly receive a diploma should receive one. This issue of The FORUM is focused on the more than 90% in our Special Education high school population who, at this time, will not).
5. At the same time, the high schools in the Bronx were going to have to absorb more than three times the 1977 number of Special Education students within a three year period (based upon known numbers of students moving up from junior high schools and projected new screenings).

Priorities

The overwhelming consensus on student needs evolved into priorities that were eloquent in their simplicity:

1. Every student who could possibly be eligible for a diploma was to be programmed by IEP to earn a diploma.

(Continued on Page 20)

Characteristics Of Bronx Special Education Students Entering High School Programs In September, 1980: The Articulation Processes

Joseph R. Salvati
Supervisor, High School Programs
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

For those special education students who were to enter high school in September of 1980, the Bronx Regional High School Committee reviewed 621 applications as of January 15, 1980, and a total of 795 before the end of March. While almost one in every six applicants requested placement in the Occupational or Adult Skills Training Centers 676 applied for admission to special education program located in regular Bronx high schools.

The process of articulating junior high school special education students to the high schools extends from September to June of the school year. It begins when junior high school staffs and parents of the applicants are provided with all the current information on high school programs and it ends when every clinical and academic record for each graduating student is transferred to the high school Learning Centers.

Candidates came from 28 intermediate and junior high schools located in the borough's six community school districts. Criteria for admission to the high school programs was established by a committee of Special Education supervisors, teachers and guidance counselors.

1. As an adaptation of the Chancellor's memorandum dated April, 1979, a student who is more than two years below grade level in reading must be at least 15 years old by September 30th, of the year entering high school.
2. Both parents and professionals must agree that the student has made an appropriate adjustment to junior high school and is socially and emotionally ready for the less sheltered high school environment.
3. A reasonable explanation must be given for a record of excessive absences.
4. Except for the physically handicapped, who receive hydraulic lift or regular busing as medically indicated, every high school student should be travel trained before entering the program.

In situations where students did not meet the criteria, the High School Committee reviewed each case for extenuating circumstances. The best interest of the child was always the determining factor.

Early in the process, a projection of staff and space needs was prepared reflecting requests for placement and expected June class register vacancies. The number of classes needed to provide necessary services has increased dramatically in each of the past three years. By next year there will be a Learning Center in every academic/comprehensive and vocational high school in the Bronx.

Over a period of several months, basic information on each student was accumulated and organized into meaningful form. Each application was given individual attention and every effort was made to secure the most appropriate program placement. The data extracted from the 795 applications provided the High School Committee with the facts necessary to determine direction for expansion.

The September 1980 Class Profile

The statistics tell us that the typical high school student who entered our program this past September (1980),is a male at least 15 years old. He is most likely learning disabled or retarded and is more than five years below grade level in reading and math. He lives in the geographic heart of the Southeast Bronx and is seeking placement in a special education program in a regular high shcool. The data that gives life to our "average" student is valuable information for identifying needs. A more specific profile of the group provides a basis for subsequent program development.

Sex

More than 75% of those students who entered special programs in the high schools this year are males. This predominance of boys can cause difficulties when organizing classes on a coed basis while trying to ensure appropriate programs for every student.

Disability

When identifying the new group by handicapping condition: 34% are neurologically impaired; 32% are educable mentally retarded and 32% have been classified as emotionally handicapped. Nearly half of the emotionally handicapped group have an additional neurological impairment. Only 3% of the September placement require programs for the physically handi-

(Continued on Page 21)

Implementing A Special Education Program In The Comprehensive High School

Robert R. Mastruzzi
Principal
John F. Kennedy High School
Terrace View Avenue & West 230th Street
Bronx, New York 10463

Prior to Public Law 94-142, little attention was directed toward the identification of youngsters with handicapping conditions and, unfortunately, even less to the quality of instruction they were provided. Recent legislation and related court decisions have resulted not only in an explosive increase in the number of handicapped students being serviced, but also in critical assessment of the efficacy of educational and training programs. Consequently, though there is a very long way to go, we are no doubt witnessing a positive trend in the evolvement of practices and procedures that will eventually enable handicapped individuals to achieve optimum potential.

The huge comprehensive high schools across the nation offer magnificent opportunities for preparing special education students for adult lives that are both productive and independent. These vast complexes usually enjoy excellent facilities which allow for the implementation of a significant number and great variety of programs. More importantly, they generally accommodate extremely divergent student bodies that are microcosms of our urban societies. The comprehensive high school is, in fact, an ideal setting for teaching the handicapped to assimulate themselves in a world that is neither sheltered nor imaginary.

The success of any approach is contingent upon the sincerity and integrity with which it is initiated and nurtured. Needless to say, programs will be destined to fail in schools where bias exists, where the administration is indifferent and unsupportive, or where there is an absence of compassion and concern. The desired atmosphere must be extant or even the most conscientious, dedicated, and knowledgeable special education staff will falter and the most genuine attempts will prove abortive. Therefore, it is paramount that the school administrator do everything possible to create a wholesome environment, a humanistic setting, either prior to or concurrent with the implementation of specific programs.

Humanism can neither be dictated nor legislated; it is the product of the quality of interactions between and among people. The high school principal enhances the process by promoting equality and fostering a milieu in which people are eager to participate, especially with one another.

In this regard, the special education program is not an adjunct to the school, but rather an integral component, just as are the science, math, physical education, and other programs. Special education teachers and students must be encouraged to involve themselves in all school-wide activities. Central support services, such as the deans' office or the coordinator of student affairs, must be made available to special education teachers and students, and special education must have equal access to facilities and equipment. In short, it cannot be "them and us" as is the case in too many high schools. Where special education and the remainder of the school view themselves as separate entities, viable and effective education for the handicapped is an impossibility. The concept of "oneness" is more than critical, it is an absolute necessity.

Obviously, it requires more than caring to provide quality and effective instruction. Many educators will argue, most cogently, that success with any learner depends most of all upon the classroom teacher. It is difficult to take exception with this view. Hence, careful selection of staff and activities designed to promote professional growth and development must be primary concerns of the administrator. Regrettably, this is a monumental problem in special education because of its current inordinate and rapid growth. As a result, there is a dearth of qualified teachers to fill what appears to be an insatiable demand. In-service programs of substance, therefore, are vital, especially in a comprehensive high school, where desirable results cannot be achieved without intimate knowledge of the plethora of available offerings and services.

The approach in educating youngsters with handicapping conditions is no different from the one utilized in dealing with regular class students; it must be exciting, challenging, creative, and, above all, diversified. The contained setting, commonplace yesterday, should be the anomaly today. Sitting in the same high school classroom all day with the same classmates and being exposed to the same monolithic techniques, is stultifying, boring, and unproductive. The imaginative and vibrant high school had unshackled itself and infuses any or all of the following approaches:

Special Programs

Too often, mainstreaming a handicapped student into a regular area of concentration such as business education, health careers, automotive, etc., proves

too difficult and inviable because skills may be too complex, or the pace too fast. Very often, especially by mixing students with handicapping conditions rather than segregating them for inexplicable reasons, it is possible to design specialized programs in these areas that isolate skills, utilizing those capable of being performed and presenting them at an absorbable pace.

John F. Kennedy High School in the Bronx offers an intensive business course for special education students which focuses on retailing, merchandising, and office skills, such as over-the-counter selling, using the cash register, designing window and floor displays, filing, limited typing, and other related practices. The approach is interdisplinary with a business education teacher, who presents and teaches the skills, working in conjunction with a special educator who provides reinforcement on an individual basis. An entire, oversized room has been equipped so that it is both an office and a retail store. Consequently, the students work in a realistic setting replete with mannequins, display cases, actual merchandise (donated by the staff of the entire school), and many office machines.

Similar programs are offered in auto mechanics and health careers, and all are predicated on the view that most of these youngsters, at this time, cannot compete with those in the mainstream, and that placement in regular classes in the specialty area would result in frustration, failure and denigration. It is our contention that positive results accrue from success and a sense of achievement. Youngsters are obtaining marketable skills, within their capabilities, as a result of a pragmatic learning situation.

Work-Study Programs

Many youngsters, both normal and those with handicapping conditions profit most from the "hands on" approach. For these students an in-school experience that is combined with practical involvement in an actual working situation is clearly indicated. There are numerous ways in which the school-work method can be effected, but there are also several caveats.

The plan for each student must be carefully individualized; that is, selection of the specific activity must be in consonance with his or her capabilities and interests. Obviously, it is foolhardy to make an out-of-school placement simply and solely to provide an external experience.

Supportive in-school activities must supplement the outside activity. Courses related to the work program must be designed; close liaison with the outside agency must be maintained, not only to monitor progress, but also to provide individual assistance in school; there should be a tie-in for potential employment at the completion of high school; and, above all the outside experience must be of substance, not a menial task where perfunctory performance is likely to be acceptable. At Kennedy, an intensive and comprehensive program is conducted in cooperation with Montefiore Hospital, one of the largest medical centers in the eastern portion of the country. Because of genuine concern and interest on the part of hospital personnel and careful articulation between agency and school, our students are exposed to, and participate in, many of the duties of the hospital staff, both professional and non-professional. More importantly, there is developed an appreciation of the work ethic and the responsibilities one must assume when employment is undertaken.

Contained Classrooms

A large number of special education students cannot be mainstreamed intensively, nor can they be placed efficaciously in out-of-school programs, especially when there is severe, or even moderate, learning disability. In such cases, the self contained classroom in which a consummately trained teacher presents appropriately modified curriculum is clearly indicated. Activities in the mainstream are not panaceas in and of themselves and, in fact, can prove deleterious if not prescribed judiciously. An approach or technique should not be used simply because it is available, but rather only when the students and the activity are compatible.

The contained classroom is, therefore, an integral part of the special education unit. When utilized well, with carefully conceived curriculum, trained teachers, resource room support, etc., it is a welcome addition to the over-all program, not anathema, as some overly progressive educators and excessively enthusiastic lawmakers and judges would have us believe.

Though mainstreaming is a separate and distinct approach which will be discussed momentarily, there is a form of mainstreaming that applies to the contained classroom setting; namely, removing select handicapped students from their restricted setting and placing them in other special education classes. Emotionally handicapped youngsters, for example, are generally self-contained at first, with a view toward subsequent placement in regular classes. Very often, if not always, it is advisable to have an intermediate placement in another special education component, such as the neurologically impaired. This step not only further prepares the student for activities outside his unit, but helps special educators make a more exact judgment regarding readiness for mainstreaming. This is crucial insofar as the student is concerned but perhaps moreso in terms of the special education department establishing credibility with the remainder of the school.

Mainstreaming

In all probability, the most important factor in determining the success of the special education program in a comprehensive high school is the degree and effectiveness with which a program of mainstreaming is implemented. Indeed, if the concept of least restrictive, most appropriate environment has any merit, every attempt must be made to remove the handicapped student from the sheltered and contained setting when possible. Effective mainstreaming, however, demands great thought and circumspection.

(Continued on Page 21)

The Occupational Training Center Program

Stephen D. McSweeney
Principal
Occupational Training Center
2697 Westchester Avenue
Bronx, New York

The Occupational Training Centers (OTC) are schools for handicapped young adults which are special in philosophy, design, equipment, staff and program. There are five OTC's in New York City. They are public schools under the jurisdiction of the Division of Special Education. One OTC is located in each of the five Boroughs which comprise the City of New York.

The OTC's concentrate on a single task which is the education and job training and placement of handicapped students ages 15-21. There are over 1600 students enrolled in the OTC program at the present time. Most of these students are classified as mentally retarded, both at educable and trainable levels. However, changes of great magnitude are taking place in New York City; the entire special education program is being restructured under the leadership of Dr. Jerry C. Gross, Director of the Division of Special Education. As part of this change, it is anticipated that other types of handicapped students will be eligible for OTC placement. The nature of the handicapping condition will be secondary when considering placement in a suitable program; students needing the kind of training offered by the OTC will be considered for placement by the Committees on the Handicapped.

The proposal for the development of an "occupational" school for the retarded dates back to 1940. Special educators, working under Dr. Richard Hungerford and his colleagues at the Bureau for Children with Retarded Mental Development, conceived of a special "Occupational High School" or "Trade Preparatory School." These great pioneers in occupational education wanted to develop a school where the total staff effort could be concentrated on increasing the retarded students' social, personal and occupational competencies. The wheels of progress turned slowly, but nevertheless, turned and in 1960, the first OTC was established in Manhattan. This facility was limited and somewhat inadequate for the purpose. However, since this modest start, the program has expanded into the other Boroughs and in 1979, two new facilities which are beautiful and functional in design and marvelously well equipped were opened. The fact that these two schools were given priority at a time of fiscal contraction is testimony to the total commitment of the Board of Education of New York City to its special education programs, particularly for older students.

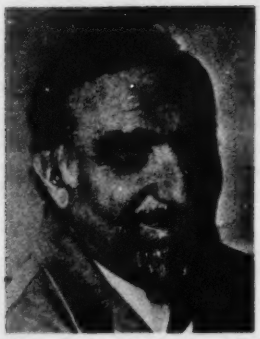
The OTC program aims to meet the needs of handicapped students ages 15-21 who are functioning in an academic range of from zero to third grade at maximum, with most falling in mid-range. The design of the curriculum strives for practicality, usefulness and simplicity. Standards permit students to fit into the programs at their speed and level without any hint of embarrassment. Instruction is carefully related to the problems of daily living. For example, in mathematics, stress is placed on telling time, reading the calendar, writing a check, using money and receiving change. Shop teachers teach measurement, how to read an invoice, count the number of items produced that day, and keep records of production, among other things.

The shops teach essential manipulative skills. However, far more important are the "intangibles" being taught, such as work attitudes, self confidence, job etiquette, work habits and appropriate social relationships. Teachers at the OTC realize that if a student cannot be placed on a job because of remediable personality difficulties, then the school has essentially failed with that student. For whatever reason, if adequate training was not or could not be given, the school must seriously review its total program in an effort to more adequately meet future needs.

If a student is fired after placement on a job because of lack of adequate job preparation, the school must be concerned. This is so because the design of the program is to have a total commitment to the student, to impart to the student all the necessary manual and non-manual skills prior to being on the job.

The function of the OTC is to take immature students and make them into young men and women who can work in a productive capacity in this society. To this end, a variety of approaches must be used because there is no one "answer" as to how behavior is changed. The Adkins Life Skills program is being used experimentally in the school to intensify job readiness. Many classes in all OTC's are located in off-site locations where students work under careful supervision of OTC teachers and site employees. Such locations are hospitals, state parks, nursing homes and colleges. Full time placement counselors endeavor to place students on jobs and follow up on the placements. General production shops train

(Continued on Page 22)



The Vocational High School Experience

David Allen Miller, Ed.D.
Supervisor, High School Programs
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

Consistent with "least restrictive environment," provisions of P.L. 94-142, and the need for learning-handicapped students to be prepared to successfully enter into the "world of work", special education classes were organized in the Bronx vocational high schools in 1977. From the modest beginning of two classes of 30 learning disabled students at one site to the present enrollment of 170 students in 15 classes (servicing learning disabled, emotionally handicapped and neurologically impaired-emotionally handicapped students) at three vocational school sites, the program has grown considerably. While the problems encountered in implementing this special education program have grown in almost geometric proportions, the opportunities for special students to acquire marketable skills is now enormous.

The course offering available to the special students at Samuel Gompers Vocational and Technical High School, Alfred E. Smith Vocational High School, and Jane Addams Vocational High School include: auto mechanics, climate control, radio-T.V. repair, electrical wiring, carpentry, plumbing, building construction and maintenance, cosmetology, printing and graphic arts. The logistics and human aspects of the planning and implementation of such a wide and interesting array of vocational courses can be grouped around the following, non-mutually exclusive areas:

1. Special Student Personal-Social Adjustment
2. Regular vocational staff acceptance of the special student
3. Special education staff scheduling and programming
4. Appropriate vocational course offerings for the special student

A brief discussion of these four areas shall attempt to serve as a summary statement of the current status of the special student's experience in the Bronx vocational high schools.

1. Many students find their first encounters with secondary education in the inner-city to be a devastating experiences. From the security of the self-contained primary or intermediate level school, to the complex departmentalization of the large high school, many "non-handicapped" students feel "lost in the shuffle". For the learning disabled and emotionally handicapped students, who frequently exhibit what Johnson & Myklebust (1964, p. 295-296) called "social imperception", just moving from class to class in the high school may be extremely stressful. This problem is compounded in the vocational high school because a greater portion of the student's time is spent in the mainstream as compared with special class peers in the academic/comprehensive high school. The most important function of the vocational high school teacher in charge (TIC) is to "bridge the gap", for the special student, between self contained and departmentalized programs. By establishing an immediate, close and healthy rapport with special students and parents, the TIC attempts to put them at ease early in the term. The TIC is aware, for example, that when special students get lost in the building (this author frequently loses his way in the labrynth of large inner-city high schools) they may tend to panic. The TIC is also aware that many special students tend to over-react to peer teasing, teacher criticism, or minor daily frustrations and invariably either withdraw from the situation or resort to "acting out" behavior. The TIC is available to prevent and defuse these over-reactions on the part of special students. The vast majority of special students, with benefit of this added support, have successfully learned to cope with the personal-social problems encountered during the first weeks in the vocational high school.

2. Regular staff acceptance of the special student is a particularly important factor in the implementation of a special education program in the vocational setting. The regular shop teacher often anticipates that he or she will have problems with the special student. "I don't know how to teach special students. . .Can they be trusted with potentially dangerous shop equipment? . . .Do they get violent?" are only a few of the frequently made remarks of shop teachers, into whose classes the special student is mainstreamed. The key person involved in assuaging these common fears is the special education teacher. He or she serves as the special student's advocate in the school, while also providing reassurance and support to the vocational teacher. This support is provided during the regularly scheduled mainstream support period in which the special education teacher:

a) reinforces shop safety rules with his/her special students.

(Continued on Page 23)

The Work-Shop Program Bridging The Gap Between Employability and Employment

Carleen D. Cumberbatch
Supervisor, High School Programs
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

The Work-Study Program was designed as a non-renumerative entry level job training program with an emphasis on the interpersonal behavior of the students; their attitudes toward employment, their ability to take criticism from a supervisor, their ability to get to work on time, their ability to complete a task satsifactorily, their ability to groom themselves neatly and cleanly, their ability to follow oral directions, their ability to be on the job each day, their ability to socialize in an acceptable manner with their peers.

Work-Study helps teachers to examine students interests, aptitudes, attitudes and abilities; to relate them to career opportunities; and to make personal decisions regarding future plans for employment and education. Work study is dependent upon a collaborative effort among schools, parents and teachers, business, industry, labor, the professions, government and the broader community to help individuals acquire and use the knowledge, skills and attitudes necessary to make work meaningful and productive. This philosophy follows the definition as set down by the U.S. Office of Education and the Statewide Advisory Council on Career Education.

One Day A Week Work Study

Originally, the program was designed as a sequential course offering to begin in the sophomore year and conclude in the senior year. In the Bronx, it existed only at the Veterans Hospital for the high school junior level EMR (Educable Mentally Retarded) students. The program was set up so that each of five high schools (Morris, Stevenson, Roosevelt, Columbus, and Taft) had one assigned day at the Bronx Veterans Hospital.

The Director of the Volunteer Department arranged to have the students work in the various departments in the hospital. The teacher assigned the students to the departments and met them in the Volunteer Office on the assigned day before they began their work. Throughout the day, the teacher visited the department to observe and evaluate the students work habits.

When this year was successfully completed by the students, they were assigned to the senior year level which included part time employment. The employment did not take place at the hospital but was community based in mother-father stores, supermarkets, and day care centers. The jobs were developed by the coordinator in each of the schools and by the city-wide job developers from the Bureau for Children with Retarded Mental Development.

As a part of the Bronx Region's approach to increase the employ ability level of high school special education students, the Work-Study Program was expanded to include a Work-Study Consultant for the Borough as well as a Job Developer. An over-all increase in the student population in the various categories of handicapping conditions identified the need for a program for *all special education* high school students regardless of handicap. We recognized the prime importance of work in our society and the major role that school should play in preparing students for the world of work. Therefore, it was essential that the Work-Study Program:

"1. Involve all areas of instruction so that *all* pupils were encouraged to explore a variety of vocations, occupations, and careers.

2. Infuse work study concepts developmentally across subject areas to achieve a more lasting effect and a high level of pupil learning. All work study teachers and learning center coordinators would share this responsibility.

3. Provide an organized and systematic approach to learning about the variety of occupations available to pupils.

4. Provide the guidance leadership for the students in the area of career development and make accessible the related resources in the home school.

5. Embrace the concept that people must learn to function effectively in many life roles: consumer, worker, citizen, parent, family member and neighbor. Students should be enabled to develop the knowledge, skills, and attitudes needed for these roles."

In order to assure mutual understanding and success, many months were spent meeting and conferring with hospital administrators, parents, principals, parent groups, teachers, and students to discuss the formation and implementation of the program.

Finally, in March, 1978, we were ready to begin

the program at the North Central Bronx Hospital with twenty HC 30 (learning disabled) students and two teachers from Morris High School. Ms. Haydee Ramos the director of volunteer services at North Central Bronx Hospital was most cooperative and accommodating to us. With Ms. Ramos' assistance the union accepted our students as young trainees in every department in the hospital. The students would be assigned to a regular employee as an apprentice. We had students assigned to housekeeping, receiving, radiology, dentistry, pediatric out patient department, building maintenance, food services, inhalation therapy, woodworking, central supply, medical records, laundry and clerical offices. The students were assigned to the hospital three days a week, Monday, Tuesday, and Wednesday, from 8:30 A.M. to 2:00 P.M. with a 45 minute lunch break simulating the adults work day. They were given uniforms and I.D. badges and became an integral part of North Central's work force.

With the initial success of the Work-Study Program at North Central, it was not difficult to develop programs at the remaining sites. By September, 1978, we had a Work-Study Program for special education students for each of the ten high schools, with modifications that made the program appropriate for those students. For instance, at one high school, the administration did not want the students out of the school for the full day. Consequently, as per Regional policy to open sites in a flexible manner in order to accommodate the needs of each school, we arranged for the students to be at their hospital site on a half-day basis three mornings a week. In addition, we also provided a school bus to transport the students from Montefiore Hospital to Kennedy High School so the students would arrive in time for their classes. The school bus was an exception, not a rule. Independent travel skills as a result of travel training, is an important part of the program.

The Work-Study Program as it exists in 1980, is an expansion of the 1977, concept. We currently have programs in every comprehensive High School in the Bronx. The Vocational High Schools were not included in the program. However, if it was desirable for a student to be in the Work-Study Program, he could be transferred to a comprehensive high school. The special education students in Stevenson, Morris, Kennedy Columbus, Lehman, Walton, Clinton, Evander, Taft, Roosevelt, Truman and Monroe have work-study programs. The program is now housed at the following private and municipal hospitals: North Central Bronx, Jacobi, Montefiore, Lincoln, Misericordia, Prospect, Einstein, and Kennedy in addition to the Veteran's Hospital. These schools and hospitals are a part of the One Day Work Study Programs. In some instances a school may have programs in two different hospitals. For instance, Stevenson High School has a one day program for Educable Mentally Retarded students at the Veterans Hospital on Tuesdays, but also has a one day program for Learning Disabled and Emotionally Handicapped students at Jacobi Hospital on Fridays. In most instances each high school has a one, two, or three day work study program at a specific hospital. The students in classes for the Learning Disabled, Emotionally Handicapped, Neurologically Impaired-emotionally Handicapped and Mildly Retarded are involved in programs in each of the hospitals. The Veterans Hospital is the only site that is limited to a specific handicap.

The current one, two, and three day programs are basically the same as the original one day program design. The students and teachers report to the site on their assigned day or days. Once the students "sign" in they report to their departments and work at their tasks. The teacher visits each department, confers with the department supervisor and evaluates the students. The teacher also designs classroom lessons based on the students experiences at the work site. These lessons to be infused in the language arts, reading, math, social studies, and guidance lessons.

Full Time Work-Study

No single learning formula can be considered best for all students. It is essential that alternative programs be provided to meet the needs of the students. This concept had to be adapted to make the Work Study Program meaningful for all the students. Consequently, we designed full time Work-Study programs to provide a program for the students who are not prepared to enter either post secondary education, or gainful employment. There are two full "Five Days Programs"—one at North Central Bronx Hospital and one at Prospect Hospital. The program at Prospect Hospital is designed for students who have completed three years of study in their high school and are in need of an alternate site with concentrated vocational training. These students can be assigned to work in food preparation, receiving and delivery, central supply, nursing, building maintenance, housekeeping, electrical installation, laundry, and the clerical offices. The work study teachers is on site full time. Students work at the hospital five days a week but remain on register at the home school. A student can be returned to the home school for a regular program if it is deemed advisable.

The second "Five Day Program" was implemented at North Central Bronx Hospital for a full clerical training program. These students are trained in various offices in the hospital to learn filing, recording, collating, operation of office machines, typing, and reception skills. The program is adaptable for students with gross and fine motor deficiencies as well as the students with a high aptitude for clerical skills. The students in this program have also completed three years of study in their high school and report to the site five days a week, as does the teacher, but they remain on register at the home school.

Co-Op Work-Study

Based on the philosophy of the *New York State Plan for Career Education (1979)* that student motivation increases if there is a relationship between school and the world of work, a Co-Op Work-Study Pro-

(Continued on Page 24)

After-School Vocational Skills Program For Handicapped Students

Larry Chernow
Occupational Training Center
2697 Westchester Avenue
Bronx, New York

Rita Schwartz
John F. Kennedy High School
Terrace View Avenue & West 230th Street
Bronx, New York 10463

Vocational and occupational training programs are being emphasized by educational systems more this decade than ever before. Handicapped and special education students have become priority populations for whom programs are being developed, preparing them for the competitive work environment. Such legislation as Public Law 94-142 and New York State Education Law, Sections 3202 and 4602 have supported the right of *special* individuals to a vocational education. These laws are further backed by the federal Office for Civil Rights Guidelines (45 CFR Part 80, Appendix B, IV) which prohibit unlawful discrimination in vocational education programs. Bronx Secondary Special Education students are afforded the opportunity to develop skills for employment by attending the VEA/Bronx After-School Vocational Program.

Today, thousands of handicapped secondary school students ask themselves, "How will I learn the skills I need to get a job?" Parents are asking, "Will my child be able to work in a real job?" Educators, therapists, and other professionals demand, why don't we have sufficient training programs for handicapped adolescents?"

There have been a limited number of programs in New York City which gave handicapped adolescents a vocational experience during the school day. In order to offer a vocational experience to every high school student in the Bronx Region, an after school program under the auspicies of the Vocational Education Act Program, "City-wide Intergration" was established during 1978-1980. Five hundred and twenty-one special education students have participated in the Bronx program.

One plans developed, three general objectives were adopted:

1. To expose younger students to a variety of skills
2. To provide vocational skills training for entry level jobs for older high school students
3. To prepare students for high school vocational programs while in junior high school

Other objectives include attendance, punctuality, positive attitudes toward work and supervision, self-confidence, and the ability to work under pressure.

Plans for teacher selection and program development began in the 1978-79 school year. Each class was to enroll between 10 to 14 students with attendance to be 80%. If a class size was below five, the class was cancelled so funds could be transferred to an area of greater need. Each class had to have a licensed vocational teacher who was responsible to teach the competencies and modify the curriculum as needed.

In each school, a special education coordinator was placed in charge of:

a. enrollment of students
b. liaison to teachers, students and parents
c. selection of courses
d. problem resolution

The coordinators were available when the classes met, usually twice per week for two hours each session.

Fifteen hign schools have had after school vocational programs for the handicapped student. There have been 47 classes consisting of 521 students. From the second year the program grew 33% in the number of pupils it reached. Improvement of each special education student's vocational skills as well as work attitudes and habits, was apparent. What a worthwhile experience it has been for students to be grooming dogs, repairing brakes, sawing and planning, making plastic signs, maintaining buildings, preparing food, repairing burglar alarms, typing and filing, using calculators, preparing beds and feeding the ill and wiring electric circuits. A student may attend the training program at any school.

As we realized that our seniors needed to do some "catching up" on their skills, we developed a Saturday Vocational Training Program in the spring of 1979. This was so successful that the next term we opened a Saturday Program for Special Education students in all secondary grades.

Of course, this program is only a temporary measure. Special education pupils should be experiencing shop as part of their mandated day school program. When this is accomplished, VEA funds could be focused on job development and placement in competitive jobs.

A Structured Curriculum Approach To Teaching Life Skills

Joseph G. Hickey
Supervisor, Funded Programs
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

One of Special Education's foremost problems has been the preparation of students for obtaining and maintaining employment. The Adkins 1970 Life Skills Program addresses this problem in a very straightforward manner. This program is divided into ten skill units which sequentially develop the necessary career awareness and related skills for participating students. Through the use of media, especially closed circuit television, a motivating reality-based curriculum assists the teacher in providing students with skills and attitudes needed to compete in today's job market. While some school districts might be dissuaded from using this program because of the cost of the materials or A.V. equipment (approximately $5,700 and $5,000 respectively), it should be pointed out that this is a one time investment which can be used year after year by different groups of handicapped students.

Each unit of the Adkins Life Skills Program employs counseling and pedagogical techniques in the following four stage approach:

1. *The Stimulus Stage:* the student is shown a prepared video tape to motivate the learning process.
2. *The Evocation Stage:* the student is signified as a source of knowledge. The Life Skills Educator (LSE) elicits students previous experience to discuss and solve the problems depicted in the stimulus stage.
3. *The Objective Inquiry Stage:* The LSE presents new information to the student which serves as additional problem solving material. This stage utilizes cassette tapes, workbooks, acetates, video tapes, and role playing.
4. *The Application Stage:* the culmination of each Adkins unit occurs during this stage. The student now integrates previously known and new information in a reality based project.

In the Bronx Special Education Region, the first of six special education regions developed by New York City's Division of Special Education, we have found the use of closed circuit television a most effective instrument in producing positive behavioral changes in special education students. The television serves as a mirror for the students so that they can perceive themselves as others see them. This, combined with peer and teacher assistance, results in dramatic positive behavioral changes.

Listed below are the ten units in the Adkins Life Skills Program:

Unit 1: Who I Am And Where I Want To Go?
Unit 2: Ten Occupational Fields: How Do I Explore Them?
Unit 3: Jobs and Training: Beginning The Search.
Unit 4: Employment Agencies and Personal Contacts.
Unit 5: Choosing A Good Job For Myself.
Unit 6: Planning For Personal Goals.
Unit 7: Developing A Vocational Plan.
Unit 8: Looking Good On Paper.
Unit 9: The Job Interview. How To Be Effective?
Unit 10: Keeping My Job; Habits That Help.

The primary aim of the Adkins Life Skills Program is to help students develop skills in finding, getting and keeping jobs. In order to achieve this objective it was necessary to adapt the Adkins materials for use by our specific handicapped populations, as well as provide additional, after school, time for job development and placement by the educators involved in the program. Modifications to the program were made by the program staff which consisted of a Project Director, an Assistant Project Director, two school based life skill educators and a paraprofessional. Weekly meetings involving the staff were held on Fridays at which time there was a two period (approximately one and a half hours) group activity with students. The remainder of the day was devoted to problem solving, preparation for the following week's activities and modifications. Modifications were made when the reading level of the written materials or the comprehension level of the tapes used in the program were beyond the ability of the participating students. New materials were also developed by the staff to teach and reinforce the concepts of each of the ten units. It was the unanimous opinion of the staff that a major strength in implementing the program was in providing the time to problem solve, discuss, plan and modify the units on a regularly scheduled basis. It was also felt that the job development component was critical to the success of this program since it serviced handicapped populations who needed someone to make the link from the school to the world of work. Even though this component could have been carried out

(Continued on Page 24)

Clerical Skills Training For The Handicapped—A Regional Approach

Peter Blake-Ward
Teacher Trainer, Funded Programs
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

Rational

One of the most difficult decisions facing administrators of programs for the handicapped is selecting a vocational program from the many that could be offered. The difficulty is compounded by the fact that the program chosen must meet the educational needs of the students, allow them to acquire the social and life skills necessary to enter the world of work and prepare them for competitive employment in a field where jobs can reasonably be expected to exist after their graduation.

In an attempt to meet these needs, the Bronx Special Education Regional Office, one of six regions in the New York City Board of Education's Division of Special Education, undertook the teaching of Clerical Skills.

One of the factors in this decision was a study done by the Board of Education's Division of Educational Planning and Support which found that of the "top" twenty projected jobs for the period 1976-1980, nine were in the Clerical Skills area. (Mollo, 1977)

As a result, the decision was made to introduce clerical skills training in two Bronx high schools, and where it proved to be successful, to allocate supplementary funds to build the program into all Bronx high schools. The program had as its goals meeting the following student needs:

To provide:

1) Training in a competitive job market area. (Clerical Skills)
2) Training in life skills, social skills and socialization.
3) Part time employment prior to graduation in order to establish a work history.

Background

Planning for the development, implementation and possible expansion of the Clerical Skills Training Program took place in the Fall of 1977. By the Spring of 1978, two workshops were in place. They proved to be successful with children with the following handicapping conditions; the educable mentally retarded, emotionally handicapped, learning disabled and the physically handicapped. In the Fall of 1978, two more units were added and by the Fall of 1979, every Bronx high school had a clerical skills practice workshop.

Workshop Experience

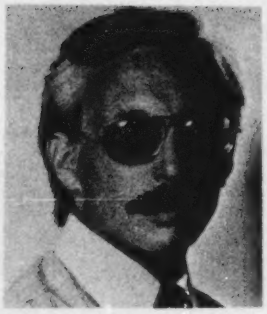
Within each Bronx high school, a room is designated as the Clerical Skills Practice Workshop. Located in each workshop are the machines that one would most likely encounter in an office: time clock, file cabinet, typewriter, mimeograph machine, calculator, adding machine, rex-o-graph machine, collator, binding machine, stencil cutter, cash register and price marker.

Students in the workshops serve alternately as receptionist, secretary, file clerk, librarian, cafeteria manager and general clerk.

The room is set up as an office to the extent possible within the confines of a school building. Each student in the workshop is assigned a task. At the end of the month, they choose new assignments so that by the end of the school year each student will have had a chance to work and be trained at every position. In general, students in grades ten and eleven get ten periods a week in the clerical practice workshop. Students in grade twelve receive five periods a week, since many students are by that time placed in part time employment. The part time employment can be either competitive or stipend supported depending upon the individual child's skills, needs and availability of stipend funding.

Each workshop has a time clock and the students in the workshop are expected to clock in and out every day, just as they would be expected to do in an office. Visitors are greeted by the receptionist and directed to the proper person. The secretary types out bills to be sent to teachers who have placed orders for materials to be duplicated, collated or rex-o-graphed. Messengers deliver the materials, collect all monies and turn it in to the cashier who prepares the receipt and keeps a record of the transaction. Monies collected are paid to students who are rated on their work in the workshop each day. By requiring the children to relate to several other students in delivering, processing orders, handling money or relying upon another student to keep accurate records of their work the children are constantly reminded that there is a great deal of interdependence in the workshop. The importance of maintaining good relationships with other members of the group, the necessity

(Continued on Page 25)



The Role Of The Job Developer

Richard Coar
Job Developer
Placement and Referral Center for the Handicapped
362 Schermerhorn St.
Brooklyn, New York

The young man who sat across the desk from me at the Placement and Referral Center for the Handicapped, was fairly typical. He had received a Certificate (not a Diploma) from a New York City academic high school. He was a slow learner, and had been unemployed since graduation, one year earlier. After a short discussion to put the young man at ease, I helped him fill out a job application, and administered several short skills tests to determine his capabilities. When these were completed and scored, we sat down to work out a job plan together. As we talked, it evolved that he liked to work with his hands, that he had been mainstreamed in high school wood shop, and that he had worked one summer as a maintenance helper in a hospital near his home.

Most importantly, the young man came to the office job ready:

- —He was neatly dressed, clean, and looked like he going to a job interview.
- —He was reasonably well-spoken, and polite.
- —He had a positive attitude toward the world of work.
- —He possessed some skills: he could fill out a simple job application, could travel on public transportation, and knew something about working with wood.
- —He had a positive work history, gained through a high school work-study program and the Summer Youth Employment Program.

I remembered a job card that had recently been circulated in the office listing a position as a helper in a furniture refinishing company. An appointment was set up, the young man was hired, and he has been working there ever since.

The case above is a success story, to be sure, but not at all atypical. The young man described here was one of over four hundred clients placed by the Center in private-sector employment last year. In addition, some 1200 special education students were provided with stipend summer work experiences and other clients were referred to agencies for further training, medical treatment, or sheltered workshop jobs.

In a sense, the Placement and Referral Center was able to accomplish its work by being "client-ready," and able to handle the growing job requests of a city-wide handicapped population. Its staff of job developers have to serve in many capacities: teaching, counseling, and serving as an advocate for handicapped people.

As a teacher, the job developer instructs clients on how to dress, how to fill out a job application, and how to conduct themselves on interviews. He conducts practice interviews, where handicapped youngsters have a chance to role-play, and to develop the confidence and ease that come only with experience. Sometimes, the job developer/teacher must teach even the most basic work-related attitudes and behaviors, such as not bringing friends along for company on an interview, nor calling in sick or late because of the weather. Unfortunately, some youngsters have to go through the experience of losing a job before they learn these lessons; but it is the responsibility of the job developer to teach these attitudes before the youngster fails.

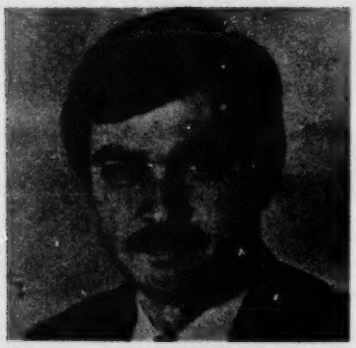
A job developer has to be a sensitive counselor, able to assess human potential, and interpret attitudes, skills areas and job-readiness. If he finds a young adult to be job-ready, he must then use his judgement to decide upon a suitable placement; if he finds a client not yet prepared for work, he must make the appropriate referral to a vocational or medical agency that can provide the missing elements.

A job developer must be an educational liaison. Along with the close articulation necessary with other agencies, he has to work in close coordination with the high schools and Occupational Training Centers. Many good referrals of appropriate youngsters come from the high school teachers and guidance counselors. Center feed-back into the schools regarding employer needs and attitudes can translate into up-dated classroom procedures and curricula.

Perhaps the most important role the job developer must fill is that of advocate for the handicapped in the business world. Employers have misconceptions, fears and outright prejudices concerning the handicapped. To allay the fears and get youngsters hired requires a deep knowledge of handicapping conditions, a personal involvement with the clients seeking work, and the ability to communicate with the prospective employers.

Leads for job openings come from diverse sources. The daily newspapers always list job openings. Some organizations publish newsletters listing vacant posi-

(Continued on Page 25)



Microcomputer Applications To Special Education Administration

Edward G. Martin, Ed.D.
Coordinator, Computer Services
Bronx Special Education Regional Office
650 Hollywood Avenue
Bronx, New York 10465

It is essential, in ensuring the delivery of special education services to students, that administrators maintain accurate and easily accessible information to facilitate more timely, cost effective, and educationally sound decisions.

While the worth of computers in this regard has long been established in research and practice, most such systems (even recent minicomputers) are beyond the range of administrative budgets, with prices varying from $15,000 to well over $250,000.

However, many information problems can be ameliorated through creative use of low-cost, state-of-the-art microcomputers which are well-suited to handle the multiplicity of special education classifying data and are available at prices substantially below $5,000.

These small yet powerful machines can be programmed with relative ease to respond to many building and district administrative concerns: encumbered accounting, personnel, guidance, student and staff attendance, student placement, interschool articulation, and state education reports, additionally, they have the potential to eliminate hundreds of man-hours storing, retrieving, and preparing information for use by special education decision makers.

For the past year, the Bronx Special Education Regional Office has been successfully computerizing some of these applications using a RADIO SHACK TRS-80 microcomputer. The basic unit, obtained through funding sources for instructional and recreational student use in our summer program, was expanded with added components to enhance its usefulness to regional administration during the school year. To permit quick random access, larger storage and "hard" (printed) copy, the system now includes a mini-disk drive and printer in addition to a display screen, cassetta recorders, interface and keyboard—all of which fit on one desk. Total cost: approximately $3000.

The following examples, by no means the only uses for the microcomputer in special education, cite two present applications of the system in the Bronx region.

Monthly Attendance Procedure

Each month, approximately 900 special education teachers in the six Bronx community school districts report student attendance to the regional office. This data is used to generate information (class registers, percent attendance, classroom vacancies and overages) which is crucial to the timely placement of students and the evaluation of ongoing classes in complying with various governmental mandates (PL 94-142, New York State Education Law, etc.).

Before the microcomputer was introduced, the required checking of data, calculation of variables, summarizing, regrouping, writing, totalling, rechecking, and typing routinely took three weeks to complete, thus forcing the regional director, supervisors, and staff to make decisions based on information that was almost one month out of date. The use of the microcomputer reduced this time to less than two days.

The microcomputer system, which stores all classifying information in disk files (entered only *once* by the typist and updated as needed), required just three values to be typed monthly for each class, namely, total register, total attendance, and register last day of month. This produces a thirty-page report complete with appropriate headings, class and school titles, and tables of all appropriate information. All this was calculated, stored, verified and printed without the need for further human input or data manipulated. In addition, computer-generated summaries for each district, special education program, and the entire region, allowed comprehensive and timely decisions to be made, resulting in more effective use of of available resources and faster placement of students.

Interschool Articulation

Supervising the transfer of Bronx special education students from elementary to intermediate/junior high schools, and from intermediate/junior high schools to high schools, presented added difficulties due to the large number of schools (over 120) and the variety of handicapping categories which must be considered in selecting and obtaining classroom space.

Sound articulation procedures, based on concepts and practices developed by Dr. Meyer Lieman, had already been created for use within the Bronx region. The data manipulation portions of this process had been designed to allow future computerization.

These were easily translated into a microcomputer file structure which substantially reduced the time and human workload needed to organize and retrieve information regarding projected space needs, student

(Continued on Page 28)

Expanding Career Opportunities for High School Special Education Students: An Inservice Education Project

Bert Flugman, Ph.D.
Leo Goldman, Ph.D.
David Katz, Ph.D.
Institute for Research and Development Center for Advanced Study in Education Graduate School and University Center City University of New York

This year, 1980-1981, we are engaged in the second stage of a three year project to provide inservice education to high school staffs about the career needs of handicapped students. Funded by the (now) Office of Special Education and Rehabilitative Services of the U.S. Department of Education, the project grew out of early projects we conducted, where, over a period of five years, we trained counselors to work with special education students. From those projects, we realized that the school must change in certain ways if handicapped youth are to have full opportunity to realize their educational and vocational capabilities.

The central purpose of this project is ultimately to increase the participation of students with disabilities in those programs and activities in the high school that contribute to career and vocational development. This includes industrial arts and vocational shops, related academic courses, vocational counseling, co-op programs, field trips, and any other activity that contributes to the optimal development of students in the career area.

The contribution of this project toward that ultimate goal is by means of inservice education of the faculty of each participating high school. More specifically, a team was established in each school, including vocational, academic, and special educators, counselors and administrators. Called the "gatekeepers," this team can directly or indirectly open gates in the school for special education students—directly through their work assignment at the school and through their recommendations to the administration, and indirectly through their outreach to colleagues.

Concretely, the project concentrated on one borough each year—The Bronx in 1979-1980, and Queens in 1980-1981. With the guidance of the Office of the Borough Superintendent of High Schools and the Borough and Central Offices of Special Education, we identify five high schools in that borough. In consultation with each school's principal, a team of six persons was selected. The team members are professionals who have a commitment to the goals of the project and who are able to play an influential role in the school whether through their official status or their informal leadership role among their colleagues.

The major activity of the project was a year-long series of workshop meetings with the five combined teams—biweekly and rotating the meetings among the schools. The topics of the meetings in the first year of the project were:

Self-exploration of attitudes toward disability through sensitizing activities and exercises.

A dialogue with parents of special education students regarding their needs, concerns and hopes for their children's future.

A dialogue with special education students regarding their career and vocational aspirations.

Analyzing current school based vocational/career services and programs for special education students. Formulating tentative team program goals for the year.

An overview of disability (physical, learning, emotional and mental retardation) and its implications for school based career/vocational programs.

A theory of career maturity and its application to special education students.

An overview of career education and vocational programs for special education students in New York City Public Schools.

A dialogue with upper echelon special education administration regarding implementing or enhancing school based vocational/career programs.

Career counseling resources for special education students, school based and off-site.

Exemplary career education (and occupational exploration) programs for special education students, including self-contained career education schools.

(Continued on Page 2)

Vocational Education

(Continued from Page 5)

a job preparation effort, and serve as important student motivation.

Where no money is available, volunteer experiences have been used instead. A well-developed program of volunteer work experience in the hospitals, originally created by the High School Work/Study Program, rotates students through a supervised job experience, exposing them to a wide range of occupations. This kind of experience can serve as one component in a vocational training program; where no in-school resources are available, it can serve as the core of a vocational training program.

Other volunteer programs are being utilized. The Executive Internship Program offers students a six-month volunteer internship with an executive in industry; some special education students have taken part and more are being recruited.

As the Division of Special Education moved toward a Regional structure three years ago, the pilot region was established in the Bronx.

Determined from the outset to provide vocational preparation for every high school student, the Bronx Region put together a broad vocational training program using every available resource. The Region began with a volunteer work-experience program in hospitals and other non-profit facilities; it built in shop training after school in virtually every high school. It emphasized job development both part-time and, as students left school, full time. The Region wrote grants for special projects. The results of their efforts are detailed in articles throughout this journal. Without special funding or shop construction, the Region offered vocational options to every high school student.

Five new Regions were formed at the beginning of 1980. They are each attempting to develop vocational skills training for their high school students. The model varies from Region to Region, but each is building a unique vocational program from existing resources. They have incorporated additional approaches.

One of the Regions is developing a staffing pattern which includes an occupational education teacher as one of the teachers in the regular staff allotment for each high school. Without adding an additional person, it builds in the flexibility of vocational programming within the unit itself. Another is developing two model continuums, from elementary through high school, stressing career guidance and career education.

Our goal is employability for handicapped youth. In an urban economy that suffers large-scale youth unemployment, preparing special education students to enter the world of work requires long-term effort and commitment. Experiential training is the core of a vocational preparation program; counseling and job development are the essential backup.

As our student population grows, as our needs grow, new ways of delivering service must evolve. The next frontier may be the greater involvement of the business community in the schools, as we seek new ways of providing for handicapped young people, meaningful experiences that prepare them to enter adult life and the world of work.

Development of A Comp.

(Continued from Page 6)

2. Post-high school EMPLOYABILITY was to be the primary objective for students who could not possibly receive a diploma.

3. Work-study, job development, and job placement (part time and full time) were to be incorporated into the program options for every student, as appropriate.

Translating these priorities into a comprehensive program was the essential work of the high school section of the pilot Bronx Special Education Regional Office. So much was developed, that space limitation in this issue of The FORUM precludes the description of all that was done. Reference to the authors in this issue will direct you to a more detailed description in areas that were most significant.

Selected Components Of The High School Program

1. As a result of extensive consulation with the Bronx High School Superintendent and all Bronx High School Principals , each of the 13 Academic/Comprehensive and four Vocational High Schools agreed to move in the direction of absorbing an equitable share of all Bronx special education students.

2. As the increase in population required the opening of new classes, the goal was to place a sufficient number of each type of class in each high school so that students could attend suitable programs in their regular zoned schools, if appropriate. Provision was made for flexible, appropriate placement of special education students in a variety of settings:

a. Academic/Comprehensive High Schools (see MASTRUZZI)

b. Occupational Training Center (see McSWEENEY)

c. Vocational High Schools (see MILLER)

d. Adult Skills Training Centers (not in this issue of The FORUM)

e. Career Development and Placement Center (not in this issue of The FORUM)

3. Intake and placement: A weekly meeting is held in which every student referred for a special education high school program in the Bronx is reviewed by the intake counselor and high school supervisors—and placed in the most appropriate, available school and program.

4. The first year of high school (ninth or tenth grade) initiates a career evaluation, which includes 'hands on' exploratory courses. The completed evaluation suggests possible career directions and potential post-high school employment options. After consultation with parent and student the goal is to formulate a realistic IEP for the following year.

5. With appropriate screening, placement, and programs utilizing all resources at each high school—many students should be able to complete their entire program through one high school. For students who will not receive a diploma, this can include:

a. basic competency in (functional) reading
(functional) math
writing
civics and citizenship
practical sciences
health and physical education
b. life skills (see HICKEY)
c. 'hands on' shop courses
d. clerical skills (see BLAKE-WARD)
e. career education and guidance (for one phase, see KATZ, FLUGMAN, GOLDMAN)
f. work-study program (see CUMBERBATCH)
g. after-school vocational skills program (see CHERNOW & SCHWARTZ)
h. job development and placement (see COAR)

6. Preparation of a directory of Bronx High School Special Education Programs

7. Early, systematic articulation to high school (see SALVATI)

8. Development of a computerized information and management system (see MARTIN)

9. Development of an Evening Job Training and Placement Program.

10. Follow-up studies of Special Education students who have left school.

Conclusion:

It is not enough to organize high school systems for students to 'go through'. An important consideration in the early stages of development of the program in the Bronx was our assumption that we bear some responsibility for the *outcomes*. . . for what happens to students after they leave school. The results of that kind of thinking were clear: that for the large majority of students with special needs the ability to get—and hold—a job was that significant next step.

This issue of The FORUM describes important beginnings and directions for New York City (see YAUCH), focusing on the pilot high school program in the Bronx. The circular, *Access to Occupational Education Programs,* dated July 28, 1980, from Robert R. Spillane, Deputy Commissioner, State Education Department, informs all school districts of New York State law; a cogent, timely reminder of how far we must go.

Characteristics of Bronx

(Continued from Page 7)

capped. These percentages generally correlate with last year's statistics and provided a base for a long range projection of needs.

Age

The requirement that a high school student, more than two years below grade level in reading, be at least 15 years old, applies to all students according to the Chancellor's memorandum. While there were requests to place students who did not meet the age requirement, every exception made was done on a case by case basis. The final figures showed that 88% of the class were 15 by September 30th, and 96% will be 15 before the end of calendar year 1980.

Zoning

The rapid abandonment of large geographic areas of the Bronx has had a devastating effect upon the neighborhood school concept. While we attempted to place first year special education students into their local high schools, 60% of this population were zoned for only 30% of the schools. This signficant imbalance was ameliorated by approving, where possible, requests for non-zoned and out of zone school placements. Of the 17 Bronx academic/comprehensive and vocational high schools, 16 have special education Learning Centers. Ten schools are locally zoned high schools primarily accepting students living within the designated zone boundaries. The other six of the 16 schools accept students from all areas of the borough (unzoned). After the High School Committee reconciled requests with capabilities, more than 90% of the entering high school students were placed in either their neighborhood zoned school or some other high school they specifically had requested.

Many junior high school classes visit the various high schools in the Bronx prior to making requests for admission. For those students who entered high school in September, 1980, a Bronx Special Education High School Information Fair allowed parents, students and professionals a chance to meet student and faculty representatives from each of the Bronx schools. Candidates had a unique opportunity to explore the variety of programs available at each of the Learning Centers and receive a complete directory outlining the mainstream and special education offerings for the 16 high schools and other Special Schools.

After notification of September placements, students and their parents were invited to their assigned schools for an orientation. These June meetings provided a closeup preview of the programs and an occasion to lessen the normal anxiety of the first days of high school for a large segment of the entering class.

While the special education high school population has increased more than 800% over the last three years, the Bronx Regional High School Committee has met the needs and in most cases satisfied the specific school request of each student. The combined effort of the Bronx Regional High School Committee and the Principal's Committee in setting clear objectives allowed for the timely and non-traumatic expansion of appropriate high school programs. Planned growth based on hard data has ensured the efficient utilization of our resources in meeting the challenge of PL 94-142.

Implementing A Special

(Continued from Page 9)

As indicated earlier, the student must be ready, emotionally, socially, and intellectually, for placement

in regular classes. This is a critical concern for the special educator, since ill-conceived placement can result in trauma that will preclude additional and future mainstreaming.

The nature of the class into which the student is to be placed must be carefully considered in several ways. There should be a limit to the number of handicapped students placed in a given class, else the instruction may be skewed in their behalf and the class will lose its mainstream characteristics, thereby rendering it ineffectual for the purpose it was selected. The content being presented, the pace, and the materials used must be commensurate with the youngster's ability.

The teacher of the mainstream class *must* be one who is sensitive to the needs of the special education student. Ideally, the teacher would be one who welcomes mainstreamed students, not one who feels they are being foisted upon him.

The number of classes into which any one student is mainstreamed and the rate at which they are introduced are critical. "Too much, too soon" is certain to be catastrophic for the youngster. A deliberate approach in which additional classes are added after success has been demonstrated will do much to assure adjustment to new situations.

Close contact must be maintained between the special education staff and regular teachers in every mainstream situation. The approach with each youngster must be highly individualized. The specific support provided by the special educator must be the product of the interaction between herself and the classroom teacher. It might be worthwhile to note that occasional visits by the special education teacher to the mainstream class could be of considerable value. Not only does the student sense a manifestation of support and concern, the special educator gets a better feeling for what is going on, lending greater significance to subsequent conferences between the professionals.

It was mentioned earlier that the involvement of special educators with the rest of the school staff is vital. Hopefully, this very crucial point has been elucidated by the preceding discussion, inherent in which was the need for special education teachers to not only interact with other staff members, but to have a keen understanding of the total school program and how it can be enmeshed with special education activities.

Though the views expressed concerning mainstreaming are substantive, I place them second to a transcending concept which I call the Climate of Mainstreaming.

At the outset, I made comments dealing with humanism and interpersonal relationships. I can think of no area where these are of greater importance than the interaction between handicapped persons and the regular class population. In the absence of concern and a true desire to accept and work with the handicapped, the mechanical procedures, some of which have been outlined, are devoid of value. Basic to the success of any program is the willingness of each participant to accept the others involved, and to treat them with dignity and worth.

Professionals can enhance the relationships between students by taking the initiative themselves and providing role models worthy of emulation. Cooperation, such as a willingness to meet professionally in individual conferences or by the special educator conducting in-service workshops for regular staff, is a fine example. Classroom inter-visits, as a result of which students view teachers as members of the same team, will also cement relationships between and among youngsters. Credibility, getting the other person to believe in your desire to do a good job, is the foundation upon which the finest relationships are built. A funny thing about harmony and good relationships is that they are contagious. Perhaps all of us should think more about starting an epidemic.

Kennedy High School has been involved in an interesting mainstreaming concept with Hunter College; to wit, the introduction of materials dealing with handicapped people into regular classes. In English classes, for example, the book, "Of Mice and Men," might be required reading and special emphasis might be placed on Lenny, his problems, his worth, his assimilation into society. Obviously, a sensitive teacher of English can use this vehicle to foster positive attitudes toward the handicapped.

Similary, social studies classes place special emphasis on laws such as 94-142, exploring their basis, validity, and potential in achieving desired results. Science and health classes focus on some handicapping conditions in the hope that myth will give way to fact and that understanding will lead to appreciation and respect.

In brief, the point is that a Climate of Mainstreaming is one in which there is mutual acceptance. No approach which places in proximity people who are different (in any way) is likely to be successful unless the proper groundwork is laid. If nothing else, I trust this article has been persuasive in that regard.

Our high schools have been given a great responsibility in preparing all individuals for the demands and rigors of life in a highly competitive world. It is a charge we must approach with vigor, imagination and tenacity, not merely because of court order, but in the interest of people who are in desperate need of assistance.

In my annual message to graduates, I will always stress the point that one who has received a superior education will render it useless if it is not applied with concern for others. I can think of no more commendable application for an educator than to assist in making the handicapped more self-sufficient and contributing members of our society.

The Occupational Training

(Continued from Page 10)

students for future employment in sheltered workshops. Travel training instruction is provided to teach students to use public transportation independently. Motor education programs improve

mobility and level of general fitness.

One of the strengths of the program for special students in New York City is that many parallel programs are being developed since there is no set pattern of training which is applicable to all students. The OTC as a special school has some advantages for its students, such as the following:

(1) Students who have made poor adjustment in other programs can be given an opportunity to work at their own level of interest and competence in a relatively structured and protected environment.

(2) Students are exposed to a curriculum designed for an appropriate level of difficulty which reduces frustration and concomitant stress. Students are assigned to a shop or academic area according to demonstrated ability.

(3) Trained experienced and interested teachers who are sympathetic to the students are on the staff. Special teachers (speech, travel training, attendance, job placement, reading specialists) can be concentrated in one school.

(4) Special shops are readily available to all students.

(5) The special facility permits a solid school organization concentrating all available resources and supervision on the education of the handicapped students.

(6) Within the special school structure, students are able to compete for leadership positions, school jobs and assignment to school teams. Students having about equal ability can compete on even terms.

(7) The OTC can control and provide a concentration of materials and equipment which might not ordinarily be available to the handicapped.

(8) Every shop in school is flexible—only activities which are productive in terms of training need be retained. OTC shops and facilities can be changed, revised and re-equipped as new needs arise and programs change. Adaptability and flexibility are the heart of the program. Proof of this is the almost complete revision of program in the span of 20 years.

In the relatively brief span of twenty years, a great deal of progress has been made in development of the OTC program. I have no doubt that the 1980s will see a continuation of that development in order to meet the needs of all handicapped students in our schools.

The Vocational High School

(Continued from Page 11)

b) provides students with tutorial help in shop areas,

c) provides the shop teacher with useful insights into the personality of the special student, and

d) incorporates vocational shop subject matter into language arts, mathematics and career education curriculum; in effect the special education teacher is available as a resource person to the school at large.

Regular staff acceptance of the special student is also reinforced through the medium of the Vocational Education Act After-School Vocational Skills Programs. The regular shop teacher, in working with special students in this program gains valuable insights into the emotional and cognitive needs of these students.

3. With every student scheduled for from 2 to 4 mainstreamed periods each day, it becomes necessary to provide mainstream teaching "pay backs". Among the various "pay back" models is the deployment of several special education teachers one period each in a mainstream teaching assignment. Another method is the assigning of one special education funded shop teacher to teach full time in the mainstream. Which "pay back" method to use depends upon the skills of the special education teachers and the circumstances of the overall school program.

4. Appropriate special student assignment to particular shops is a major consideration in the vocational high school. The available vocational evaluative and interest inventory instruments have not as yet been validated on the inner city learning disabled and emotionally handicapped population. Placement in a shop, based solely upon student request or middle school shop achievement, leaves a great deal to be desired. The six week exploratory shop model has been employed with a significant measure of success. In the course of a student's first year, the student is exposed to six exploratory shops. Based upon interest and achievement during this first year, a specialty shop is then selected for the student's second year. The determination of the specialization shop is a joint student-parent-professional determination.

June, 1981, will witness the first graduation of special students from a Bronx vocational high school. The real test of the efficacy of the special education program in the vocational high schools will be the employability level of these graduates. The positive nature of the vocational high school experience for the special student, however, can be best exemplified by the statement of one of the vocational high school administrators. "Thanks to the support that has been provided, many of our special students function on a par with or better than our regular class students."

With the outcome of a heightened level of employability gained through the vocational high school experience, the special student will be in a significantly better position to enter into the competitive labor market.

Reference

Johnson, D.J. & Myklebust, H.R. *Learning disabilities educational principals & practices* (2nd ed.). New York: Grune & Stratton, 1964.

The Work Shop Program

(Continued from Page 13)

gram has also been developed. These students have completed at least one year of work-study in their senior year in high school. They are assigned to work at the offices of the Committee on the Handicapped in a work-a-week go-to-school-a-week program. There are two or more students assigned to each office. Where necessary, two students are assigned for each week. This alternate assigning of students gives continuity to the work at the office as well as to the program.

The students follow their regular school program the week they are not at the work site. There is no teacher assigned to the co-op program site. Consequently, the students are responsible to the office supervisor for assignments and evaluations. However, the learning center coordinator at the high school communicates with the work site supervisor weekly. This information is the basis for academic and guidance lessons developed for classroom use.

Stipends

"Career education is not a panacea to acquire work competencies and academic skills, yet it is a significant means of blending education and the world of work." Money is indigenous to the world of work. Students should receive a financial reimbursement for their hours of labor in a manner similar to the employee they were emulating as a part of their training. The labor market and economy problems negated the possibility of students being paid by the employers at the hospital and/or the Committee on the Handicapped offices. We provided the students with stipends received from reimbursable programs, to the degree that funds were available. Funds were received from the Neighborhood Youth Corps. to allow two hundred students to be salaried during the six-week Summer Program for the past three years. Funds were also received from the Youth Employment Training Program, the Adkins Life Skills Program, the Vocational Educational Program, the Bureau for Educational and Vocational Guidance, title VIB Programs, and the Institute for the Blind to provide students with stipends for a ten hour work week at the minimum wage during the school year. Learning how to plan for the most effective use of their money is an integral part of the Work-Study Program. These experiences develop an awareness of self in relation to the work world, an understanding of the political and economic systems, and the desire to be an active, productive community participant.

Conclusion

Assessment of our Work-Study Program is an ongoing procedure. The work-study consultant, the supervisor of work-study, the work-study teachers, and the work site administrator confer periodically to discuss the needs and progress of the special education students, the work sites, and the high schools. We hope to bring about:

1. An evaluation procedure to measure pupil achievement in attitudes and skills that will demonstrate the efficacy and effectiveness of the Work-Study Program for the competitive world of work.
2. A means of communicating to the private sector the practical application of the Work-Study Program. how the program places specific emphasis on personal, social and vocational growth to prepare the students for the competitive world outside the classroom.
3. A procedure which will survey, evaluate, and disseminate appropriate resources to reduce stereotyping and to improve job opportunities for the special education student.

The Work Study Program has been acceptable to the hospital administration for several reasons but mainly because there is a teacher on site with the students. With out this vital aspect, the program would not have been as successful. The advantages are self-evident.

Reference

The State Education Department. *The New York State Plan for Career Education: The Career Education Incentive Act Public Law 95-207.* Albany, N.Y.:The University of the State of New York, The State Education Department, June, 1979.

A Structured Curriculum

(Continued from Page 15)

by other personnel, as a result of employing the staff using the Adkins materials, a better match was made between the student and the particular jobs available since the staff had an in depth knowledge of each of the participating students gained from their daily contacts.

The program was operated in two locations, a special education Green Development Center housed in a day treatment school, P.S. 12, Bronx—and the Bronx Occupational Training Center. Approximately 15 graduating students were selected in each site. P.S. 12, Bronx, serviced a class composed of students classified as emotionally handicapped, neurologically impaired and educable mentally retarded, while the Bronx Occupational Training Center serviced only the educable mentally retarded. Each class received a double period (approximately an hour and a half) of Adkins each day Monday through Thursday and every other Friday, since the sites for the Friday staff meeting alternated weekly between the two locations. In addition, students were seen individually or in a small group at least twice a week, either while in school or as part of the job development component.

Results

1. Twenty-nine of the 30 students who began the Adkins Life Skills Program remained in the program for the entire year or until they obtained full time competitive employment.
2. All 29 students were involved in employment for which they received remuneration either from the employer directly or from program funded stipends. Fifteen of the 29 students were paid by the employer at some point prior to successfully obtaining full time employment.
3. Twenty-two students obtained and maintained competitive employment for 30 consecutive

days. (30 consecutive days was one of the program's observable, measureable objectives.)

4. Most participants were placed with two or three different employers before being able to maintain competitive employment for 30 consecutive days.
5. Six students maintained employment for more than 30 consecutive days at two or more separate employers.

Conclusions

In reviewing their involvement with the program at the completion of its first year the staff agreed on the following:

a) Given a structured job preparation program that included social and life skills training as well as job development assistance, most handicapped participants were able to function well enough to obtain employment.

b) Most jobs were lost due to the inability of the student to function in socially acceptable ways to work, *not* because of their inability to perform their work functions.

c) Some jobs were lost due to the inability of the student to perform two or more different tasks and make a judgement as to which task should be performed at any one time. An example of this was the case of a student employed by a dog training kennel. The youngster was responsible for cleaning and sweeping the floors of the kennel, as well as cleaning the cages of the animals as soon as they became dirty. This educable mentally retarded student could perform either task to perfection. However, he was not able to stop one job, cleaning the floor, and immediately proceed to cleaning a cage when this became necessary.

d) Most youngsters would not have been able to obtain employment if job development services had not been provided by the program.

e) Most students would have lost their jobs shortly after obtaining them if contact was not maintained with the employer and additional counseling given to the youngster.

f) Approximately 1/3 of the ten units of the Adkins Life Skills Program was modified to meet the needs of our population. It is expected that 1½ to 2 additional years will be needed to complete the adaptation of the entire ten units of the Adkins Life Skills Program.

g) Contacts are being maintained during the 1981, school year with all participants who were placed in full time competitive employment, as well as with their employers.

h) The Adkins Life Skills Program, as employed in the Bronx Special Education Region, should be of value to all high school programs servicing handicapped students who are being prepared to join the world of work.

Reference

Adkins, W.R. Life Skills: Structured counseling for the disadvantaged. *Personal and Guidance Journal*, 1970, 49, 108-116.

Clerical Skills Training

(Continued from Page 16)

for self discipline and the importance of paying attention to the task at hand are all taught daily, both formally, and informally through the workshop experience. Ideally the teacher sets up the group, provides basic instruction in each task and then assigns students from the group to a particular task. The group members soon learn that to function effectively they must work as a team. This concept of "group formation" is an important part of the Clerical Skills Practice Workshop experience.

Conclusion

The Clerical Skills Practice Workshops have proven to be a valuable experience for handicapped students in the Bronx. It is too early to tell how many students will actually remain or be employed in a clerical skills area. Only time and a longitudinal study can provide that data. What is important, however, is that the goals of the program were fulfilled. Students with a variety of handicapping conditions, as a result of their participation in the Clerical Skills Practice Workshop, received training in a marketable skill, had the opportunity, as a result of their participation in the work study program, to establish a work history. Additionally, they were given an experience which required them to work cooperatively and effectively with others in a real life work situation.

The author would like to acknowledge his indebtedness to Mr. Alan Friedman of the New York City Board of Education's Division of Special Education, Office of Funded Programs for his contribution to the original Clerical Skills Practice Workshop at Morris High School, Bronx, New York.

References

United States Department of Labor, Bureau of Labor Statistics, *Regional report number 60—The job future in New York-Northeastern New Jersey: Occupational employment projections to 1985, February 1979.*

Mollo, P. *A comprehensive occupational education system: Research and experimentation in a career development center Vol. 2: A plan for a comprehensive occupational education system in New York City's Borough of the Bronx* (Report No. 498-AH 50188). Grant No. G007500677, Vol. N, United States Department of Health Education and Welfare, Office of Education, Bureau of Occupational and Adult Education.

The Role of the Job Developer

(Continued from Page 17)

tions. Government offices and companies with sizeable government contracts are required to have affirmative action plans. Larger firms in particular, tend to be progressive in their hiring practices.

Once the job opening has been identified, a phone call to the personnel manager should open the door for further discussion. A personal visit to the plant or office gives the employer and job developer a chance to look over the facilities to see whether any modifications will have to be made. A visit also gives the employer a chance to discuss fully his labor

(Continued on Page 28)

SONGS IN MOTION (AR 690 series) Educational Activities Inc., Freeport, N.Y. 11520 by Henry V. Colella, Ph.D. & Mario Truglio, M.S.

I felt it was important to present two points of view because this material is applicable to normal and handicapped children and also has implications for mainstreaming. George Singfield

Music encompasses a tremendous field of possible experiences for young children, and I welcome additional ways in which a child can benefit. Records are one approach to music in the early childhood classroom, and within the sphere of available recordings, one may choose from a wide variety: instrumental music, directive songs and games, classical jazz and folk songs, and the well-known early childhood songs, rhymes and stories.

A skillful teacher can work with children in a way that fosters independence, and she may offer many choices and opportunities. Music experience cannot be forced on children if they do not have a receptive attitude. That is why I recommend early free choice in listening to records—the greater the variety, the better. Music is fun and meaningful to the child who can move his body in a way that feels comfortable, and expresses his own feelings while listening to Grieg's "The Hall of the Mountain King;" or sweep strokes of paint across paper while hearing Tchaikovsky's "Nutcracker Suite;" or shake a rhythm instrument to Brubeck's "Take Five;" or use fingers and toes and words to "Eency Weency Spider;" or think and dream while hearing Stravinsky's "Fire Bird Suite." The experienced teacher knows the value of these activities and could verbalize which learning experiences are being addressed by their use for the young child.

These thoughts precede my remarks about *"Songs in Motion"* a series offered by Educational Activities, Inc., since I want to clearly express my preference for introducing musical experiences that are truly creative, where "one generally gets the impression that the children are leading the way." (Rosenberg)

"Song in Motion" is a set of six records directed as slow learning and categorized into the areas of learning and development: Fine Motor Activities, Gross Motor Activities, Language Development, Holiday Songs, Activity Songs (Nursery and Secondary) and one called Happy Birthday America. The songs are sung clearly, in pleasant voices, at a slow to moderate tempo. The assumption is that basic objectives for development of these skills is necessary to both normal and exceptional children in early childhood education, and I feel they could appropriately be used in the normal early childhood classroom. The album notes specify which skills are emphasized for each song and usually gives specific activities for each. In some cases, the same songs are used on the different albums, relating their use to different skills areas.

The suggested uses on "Fine Motor Activities," "Language Development" and "Holiday Songs" offer the new teacher structured directives for using each song, with the learning objectives spelled out. The activities include: language expression and games; body movement, art activities and combinatons of these. Hopefully, the examples set forth would encourage the new teacher to provide future musical experiences for young children that recognize and utilize objectives appropriate for social, emotional and intellectual development. The point is to stimulate creativity and accept the abilities and interests of each child, while offering opportunities for growth. I feel the records could be used to good advantage in this capacity.

The albums dealing with "Gross Motos Activities," and "Activity Songs/Nursery Rhymes" offer less structures, more general suggestions for motivating discussion and movement. The "Secondary volume" and "Happy Birthday America" are aimed at handicapped adolescents and suggest body movement, group discussion and mood reactions. These could be used in an early childhood classroom, with teacher awareness in adapting the level of expectation appropriately.

The experienced teacher might want to introduce these records first, inviting children's innovative responses utilizing their creativity. Subsequently, the suggested activities could be incorporated by teacher direction, as options or alternatives for reinforcing developmental skills.

Another use I see for this series is their application in the early childhood classroom that integrates exceptional children. The recordings are acceptable for use with both normal and handicapped or developmentally delayed children, and would be appropriate while not overly stimulating.

One of the albums states "participation through imitation may precede spontaneous action." This may be true, but I prefer to think we should hope for and expect spontaneous action if a wide variety of music is offered, and then provide examples and directions for specific learning tasks as a bonus to the joy a child derives from sound. If we recognize and utilize the tremendous interest in sound and sound-maker music, and start with the child, we will have done much in encouraging a natural love of music that allows for growth and development.

Reference

Rosenberg, Martha: "Its' Fun to Teach Creative Music"
Harriet Radwell, Director, Pre-School Programs
Samuel Field YM-YWHA
58-20 Little Neck Pkway, Little Neck, N.Y. 11362

Henry Colella and Mario Truglio have combined their experience in Special Education and music to produce albums of activities and rhythm "for the slow learner of all age levels." *Songs in Motion:* a series of six recordings of songs, dances and nursery rhymes, represents an uncreative but classic repertoire of early childhood favorites. One of the albums, *Songs in Motion: Secondary,* is specifically geared to meet the needs of adolescents. *Songs in Motion: Round the Year Holiday Songs,* is a selection of songs with a timeless and universal appeal to all

children. The tunes and lyrics in all six records are familiar to every seasoned teacher, parent and student, which is probably a positive for its purpose; however, there is not a new melody in the series. Titles such as "Pop Goes the Weasle," "Eency Weency Spider," "Farmer in the Dell" and "Skip to My Lou," to name a few, dance off the covers.

What makes five of these six albums appropriate for the learning handicapped child? Colella and Truglio are apparently well aware that the terms gross motor, fine motor and language development, have their origins in the vocabulary of early childhood curriculum goals. Inherent in nursery school songs and dances are the stimulators of these important areas of development. The authors have cleverly, if not too originally, categorized the delightful music into these three important skills units, focusing each of the recordings on a different developmental goal. Thus, "London Bridges" and "The Farmer in the Dell" and other songs and dances, come with simple but precise instructions for activities to stimulate gross motor skills. Consonant games, rhyming exercises and use of visual aids, are suggested methods for increasing and improving language. Finger plays and pantomime are included as ideas to increase fine motor development.

Add to this a pleasant, unobtrusive piano accompaniment, a moderate to slow tempo and extreme vocal clarity, and you have the ingredients Colella and Truglio have assembled to appeal to the slow learner.

Happy Birthday America, is a more ambitious recording. The authors have resurrected songs such as "America the Beautiful" and "The Marines' Hymn" and assigned them a specific place in American history. Preceding each song, one hears a brief, rather obscure historical narrative; the objective being to "help the student develop an awareness of historical and geographical development through music. . ., and arts and crafts." The goal and methods suggested are questionable, especially since the arrangements are supposedly geared to the slow-learning adolescent, a difficult group to work with at best!

The new teacher will find the collection, with its explicit directions, a useful tool for learning how to use music in the special classroom, in a structured and meaningful way.

The creative teacher can undoubtedly find several effective ways to incorporate the beloved and appropriate songs into her curriculum—beginning with students just listening.

The very experienced teacher might rate much of the content found in *Songs in Motion* as tried and true, but adding little that's very new.

Eleanor Novins, M.S.
Educational Coordinator
Samuel Field YM-YWHA Special Services School
58-20 Little Neck Parkway
Little Neck, N.Y. 11362

Professional News

Researh papers are now being accepted which contain innovative and creative approaches to the development and education of young children for the NYS Council for Children 1981 Conference. For details contact: *Dr. Judith Bondurant* (Cahpter 402, Call for Papers Chairperson, Exceptional Children Education Department, 215 Ketchum Hall, SUC/Buffalo, 1300 Elwood Avenue, Buffalo, NY 14222. Manuscripts must be submitted no later than January 15, 1981.

The Fifth Annual Conference of the Council for Exceptional Children will be held March 6-7, 1981, at SUC at Geneseo, Geneseo, NY. The convention theme is "Low Incidence Handicaps." For additional information contact: *Deborah Swallow,* c/o CEC, State University College, Geneseo, NY 14454.

David B. Lazeron (Chapter 248), a Learning Disabilities resource room teacher in Buffalo and Ph.D. candidate at SUNY/Buffalo, has assumed the position of Assistant Editor-Intern with *THE FORUM.* Lazeron also teaches a graduate learning disabilities course at SUC/Buffalo.

The Sixteenth Annual Conference of the Association of New York State Educators of the Emotionally Disturbed (ANYSEED) is to be held on the weekend of April 3-5, 1981, in Syracuse, NY. This year's theme is "The Emotionally Disturbed Child—A Catalog of Problems". The keynote speaker will be Dr. Fritz Redl. For more information contact: Everett Kelley, Conference Chairman, Convalescent Hospital for Children, 2075 Scottsville Road, Rochester, NY 14623.

Send information on special awards and honors, professional moves, retirements, grants, article and book publications and workshop presentations to PROFEESIONAL NEWS ASSISTANT EDITOR (see page 2 for address).

Microcumputer Applications

(Continued from Page 18)

groupings, special student requests and final placement. In addition, the need for typists to constantly prepare the hundreds of lists required by schools, districts, and supervisors, was eliminated. Data from student applications was typed into the computer once, with the computer then producing all necessary sort, searches, and lists as required during the articulation process.

The microcomputer files included space for student name, address, birthdate, gender, handicap, present school, zoned school, requested school (if any), supervisor, districts, and final placement. The system could instantly recall each student record for verification or update, with printouts capable of being produced according to any one or more variables contained within the stored information. For example, lists were produced alphabetically, by each sending school, receiving school, handicap, district,

The Role Of The Job Developer

(Continued from Page 25)

needs and work performance indicators.

Once the personnel manager knows that the handicapped persons are being referred to him pre-screened and job-ready, his job is made easier and a positive placement is more likely. And after placement has been made, possible problems can be resolved by following up on the client and his job situation with either a call or a second visit. The employer will then be more receptive to future placements. Employers often need reassurance that the handicapped workers they hire will be assets to their companies, not liabilities; that handicapped workers are productive, loyal and capable employees who can contribute to society as independent workers.

Finding a job is difficult at best in these times of recession and inflation, but joblessness among handicapped people far exceeds that of the rest of the population in America. In a typical year, according to federal government figures, some sixty per cent of all handicapped adults of working age are out of work. In addition, thousands who do hold jobs are significantly underemployed in marginal, short-term positions.

But placement of handicapped persons is not impossible. The handicapped are employable. Work-study and summer programs do contribute to job-readiness. Job developers can and do succeed in helping handicapped persons to attain success. Organization, hard work, and, most of all, a sincere concern for people as individuals, are the essential ingredients.

Reference

Levitan, S.A. & Taggart, R. Employment problems of disabled persons. *Monthly Labor Review*, March, 1977, 3 plus.

Microcumputer Applications

(Continued from Page 27)

requested school, supervisor, or age. One microcomputer program searched all student data to create space projections for each receiving school with subtotals for each special education category at each site—260 pieces of information all displayed on one easily-read one-page matrix, which could be constantly rerun to allow experimentation with different placement patterns. When age requirements changed, students were identified in seconds and listed by the computer for follow-up. As a result of these and other programs, the articulation process which had previously taken four to six months to complete, was finished with more information to participants in a shorter time with much less human work.

At present, microcomputer uses are being developed to include computer training for special education youngsters, a career education data bank for career exploration and job placement, and an encumbered budget system for keeping track of purchase orders and expenditures. With the aid of Science Research Associates, we are also investigating mathematics skills diagnosis and prescription for special education students involving an ATARI 800 microcomputer and programs already developed by SRA.

There is no doubt that microcomputers have a significant role to play in administration and decision-making due to their programming ease, low-cost and adaptability. As technology continues to improve with standardized programming languages, reduced costs, and increased capabilities and software, the micro will become a cost-effective alternative to many presently existing manual procedures at all levels of administration.

Some points to consider:

1. While the ability of microcomputers to provide easy update and retrieval of information make them especially suited to management, only certain portions of any management process can be assumed by the computer. Proper planning, programming, data collection, data input and interpretation of results by *human* decision-makers is still necessary and critical to the success of any computer application.
2. Computer-generated results are not necessarily more accurate nor significant than their manually generated counterparts. There is a tendency to give special consideration to computer printouts over handwritten or typed reports; however, neither one is inherently better. They both are the result of human planning, and are only as good as the logic and data with which they were produced.
3. Finally, the microcomputer is not a panacea for all administrative ills. It will not offset poor decision-making practices, nor replace weak administrative procedures. However, it can become a valuable and effective tool for the decision-maker who understands his information needs and goals.

(Continued on Page 27)

the FORUM

582 Baldy Hall
SUNY/Buffalo
Amherst, N.Y. 14260

Non-Profit Org.
U.S. Postage
PAID
Permit No. 577
Syracuse, N.Y.